

Class Schedule
BS 640 – Fall 2006
 9:00 am MWF, 4:00-6:00 pm W

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| 8/21 | Seidel | Organizational Meeting |
| 8/23 | Seidel | Differentiation of tubular reproductive system, primordial germ cells |
| 8/23 | Seidel | X inactivation, pseudoautosomal regions, hemizyosity |
| 8/25 | Seidel | Sex chromosomes, unconventional sex chromosome systems |
| 8/28 | Seidel | Intersexes, sex reversal, testicular feminization, gonadal dysgenesis |
| 8/30 am | Bouma | Primary sex determining genes, AM hormone, gonad differentiation |
| 8/30 pm | NO CLASS | |
| 9/1 | Seidel | Meiosis |
| 9/4 | NO CLASS | Labor Day |
| 9/6 am | Davis | Sexual differentiation of the brain |
| 9/6 pm | Bott and Gee | Descent of scrotal testes, temperature regulation |
| 9/6 am | Seidel | Cloning mammals and related procedures |
| 9/8 | Nett | Hypothalamus-pituitary-gonadal axis-I |
| 9/11 | Nett | Hypothalamus-pituitary-gonadal axis-II |
| 9/13 am | Seidel | Blood-testis barrier, Sertoli cell morphology and function |
| 9/13 pm | Susan McConnell | Assembling a Neural Circuit: Wiring up the Brain During Development, Frontiers in Biomedical Science Seminar, 4:00 pm, Cherokee Park Room, Lory Student Center |
| 9/15 | Seidel | Spermatogenesis, stem cell renewal, cycle of seminiferous epithelium |
| 9/18 | Seidel | Spermiogenesis, quantification of sperm production |
| 9/20 am | Seidel | Separation of X and Y sperm, 50:50 sex ratio, T alleles |
| 9/20 pm | Wolf and Powers | What triggers puberty? |
| 9/20 pm | Seidel | Epididymis, rete testis fluid |
| 9/22 | Exam I | |
| 9/25 | Seidel | Male accessory glands, chemistry of male reproductive fluids, mating, erection, vaginal plugs |

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| 9/27 am | Seidel | Ovarian structure, follicular growth and atresia, waves |
| 9/27 pm | Altermatt and Meyers | Effects of stress on reproduction |
| 9/27 pm | Seidel | Oogenesis and oocyte morphology |
| 9/29 | Seidel | Sperm capacitation and hyperactivated motility, acrosome reaction |
| 10/2 | Seidel | Sperm penetration of the oocyte, oocyte activation |
| 10/4 am | Seidel | Parthenogenesis, androgenesis, imprinting, telomeres, centromeres |
| 10/4 pm | Gee and Wolf | Effects of maternal nutrition on chronic adult diseases of offspring |
| 10/4 pm | Seidel | The first cleavage, control of transcription, aging gametes |
| 10/6 | Niswender | Normal and abnormal steroid synthesis, mammalian reproductive cycles |
| 10/9 | Niswender | Follicular endocrinology |
| 10/11 am | Niswender | Ovulation, corpus luteum formation and function |
| 10/11 pm | Meyers and Spizziri | Safety of oral contraceptives for women |
| 10/11 pm | Kemp and Altermatt | Contraception for pets and wildlife |
| 10/13 | Niswender | Regression of the corpus luteum, maternal recognition of pregnancy |
| 10/16 | Seidel | Non-mammalian reproductive cycles, sperm transport in female mammals |
| 10/18 am | Seidel | Cleavage, blastocyst formation, comparative morphology of embryos |
| 10/18 pm | Spizziri and Magee | Cystic ovarian disease |
| 10/18 pm | Ellers and Mauldin | Hormonal contraception for men |
| 10/20 | Exam II | |
| 10/23 | Seidel | Sperm injection, totipotency, embryonic stem cells, maternal inheritance, epigenetic factors |
| 10/25 am | Seidel | Genetics and oncogenes in development |
| 10/25 pm | Shoemaker and Leppien | Abnormalities in cloned mammals |
| 10/25 pm | Patten and Stokes | Human in vitro fertilization |
| 10/27 | Seidel | Female reproductive tract fluids |
| 10/30 | Seidel | Ovum transport, transuterine migration, spacing, local effects |
| 11/1 am | Seidel | Delayed implantation, ectopic pregnancies. |

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| 11/1 pm | Mauldin and Thepenier | Assisted reproduction for endangered species |
| 11/1 pm | Magee and Hudson | Reproduction in the aging female mammal |
| 11/3 | Hansen | Uterine physiology I |
| 11/6 | Hansen | Uterine physiology II |
| 11/8 am | Anthony | Pregnancy physiology I |
| 11/8 pm | David Albertini | Frontiers in Biomedical Science Seminar, 4:00 pm |
| 11/10 | Anthony | Pregnancy physiology II |
| 11/13 | Anthony | Endocrinology of parturition |
| 11/15 am | Seidel | Selection for secondary sex characteristics, sexual dimorphism, speciation |
| 11/15 pm | Stokes and Kemp | Procedures for producing transgenic animals |
| 11/15 pm | McCarter and Shoemaker | Intrauterine effects of fetuses on each other |
| 11/17 | Exam III | |
| 11/27 | Seidel | Sexual behavior and reproductive strategies |
| 11/29 am | Seidel | Pheromones, parental behavior |
| 11/29 pm | Thepenier and Bott | Mating behavior in amphibia |
| 11/29 pm | Hudson and McCarter | Human sexual dysfunction |
| 12/1 | Veeramachaneni | Environmental toxins and reproduction |
| 12/4 | Seidel | Circadian rhythms |
| 12/6 am | Veeramachaneni | Environmental reproductive toxicology – male |
| 12/6 pm | Powers and Patten | Endocrinology of maternal behavior |
| 12/6 pm | Leppien and Ellers | Tumors in offspring of women given massive doses of diethylstilbesterol |
| 12/8 | Veeramachaneni | Environmental reproductive toxicology – female |
| 12/8 pm | Review | |
| | FINALS WEEK | Final exam likely Wednesday 12/13 |